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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,855	06/19/2001	Ding Jong Wang	PMXP0107USA	7087

27765 7590 01/19/2005

(NAIPC) NORTH AMERICA INTERNATIONAL PATENT OFFICE
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER	
NGUYEN, KIMNHUNG T	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/681,855	WANG ET AL.	
	Examiner	Art Unit	
	Kimnhung Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24 and 26-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24 and 26-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This application has been examined. The claims 1-24, and 26-30 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3, 8-10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (US patent 5,712,725) in view of Lo (US patent 5,699,083).

Regarding claim 1, Faltermeier et al. disclose in figure 1A, a pointing device (mouse) electrically connected to a computer for controlling movements of a cursor on a display device of the computer (see abstract, see column 3, lines 8-26), the pointing device comprising a housing; a pointing unit (drive motors 12a, 13b, figure 2, column 4, lines 43-46) installed inside the housing for generating pointing signals to control movements of the cursor (see column 3, lines 10-26); a rollable device (3) for generating rolling signals (see column 4, lines 49-53); and a control unit (1) for controlling the movements of the optical apparatus (see abstract, see column 3, lines 64-67). However, Faltermeier e tal. does not disclose the control unit controls the light source for illuminating the rollable device. Lo discloses a cursor control device having a wheel (17) and light source (29) and the wheel may synchronously rotate with the ball a light source (29) and a sensor are respectively disposed on the both sides of the wheel (see abstract, see

column 2, lines 39-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of light source disposed on the both sides of the wheel as taught by Lo into the pointing device of Faltermeier et al. because this would for receiving the light source and the sensor through the hole and for allowing entrance of light passing via the wheel (see column 2, lines 43-52).

Regarding claim 3 is dependent upon claim 1, and are rejected on the same reasons claim 1, furthermore, Faltermeier et al. disclose in figure 1C wherein the rollable is a rolling wheel (3), however, Faltermeier et al. do not disclose and the roller comprises a reflecting surface for reflecting the light. Lo discloses an inherent a reflecting surface for reflecting the light because the roller provided by the light source that Lo discloses above.

Regarding claim 8, is dependent upon claim 1, and is rejected on the same reasons claim 1; furthermore, Faltermeier et al. disclose wherein the rollable device is a trackball (see figure 1A, see mouse ball roller 2, see column 6, lines 65-67 and column 7, line 1)

Regarding claim 9, Faltermeier et al. does not disclose that wherein the light source is positioned adjacent to the rollable. Lo discloses the light source (29) is positioned adjacent to the rollable (17, see abstract, see col. 2,lines 39-52).

Regarding claim 12, Faltermeier et al. disclose wherein the computer comprises a driver for detecting a state of the computer and transmitting a corresponding state signal to the pointing device (see control unit for controlling movements in optical, see abstract, see column 3, lines 16-26).

Regarding claim 10 is dependent upon claim 1, and is rejected on the same reasons claim 1; furthermore, Fatermeier et al. do not disclose the light source comprises at least one light-

emitting diode. Lo discloses the light source (29) such as LED (see column 2, lines 39-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of light source is a LED disposed on the both sides of the wheel as taught by Lo into the pointing device of Faltermeier et al. because this would for receiving the light source and the sensor through the hole and for allowing entrance of light passing via the wheel (see column 2, lines 43-52).

5. Claims 2, 4, 5, 6, 7, 18-20, 23-24 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (5,712,725) and Lo (US patent 5,699,083) as applied to claim 1 in view of Merminod et al. (US patent 6,157,369).

Faltermeier et al. disclose in figure 1A, a pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the computer (see abstract), the pointing device comprising a housing; a pointing unit (motors drive 13a, 13b) installed inside the housing for generating pointing signals to control movements of the cursor (see column 3, lines 16-25); a rollable device (3) for generating rolling signals. Lo discloses a light source through the wheel as disclosed above. Furthermore, Faltermeier et al. disclose an electrical conduction (see column 3, lines 64-67), However, Faltermeier et al. and Lo do not disclose wherein the rollable device comprises a transparent material; the rolling wheel and the ring being made of a transparent material to allow the light passing through the ring; the pointing device comprises a support and electrical conduction device; the light source comprising at least one light-emitting diode; and wherein pointing device comprises a at least one button; wherein pressing of the button in a predetermined and causes the control unit to transmit a feedback

signal to the computer; and when the rollable device is pressed downwards the button becomes activated.

Regarding claims 4, Merminod et al. disclose in figure 3 wherein the rolling wheel comprises a roller (12) and a ring (40), and the ring surrounding an outer circumference of the roller (see figure 3).

Regarding claims 7 and 28-29, Merminod et al. disclose in figures 2-3 the pointing device comprises a support (28) (see figures 2-3, column 3, lines 18-20).

Regarding claims 18-20, Merminod et al. disclose a roller device comprising at least one button (see press down of microswitch (34, see column 3, lines 39-40), and device is illuminated cause the control unit to transmit a feedback signal to the computer, or rollable device is pressed downwards, the button becomes activated (see column 4, lines 6-13).

Regarding claim 23, Faltermeier et al. and Lo disclose as discussed above. Merminod et al. disclose in figure 3, wherein the rolling wheel comprises a roller (12) and a ring (40), and the ring surrounding an outer circumference of the roller (see figure 3).

From the claims 6-7, 9-10 and 18-20, and 24, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of rolling wheel comprising a ring, a support, with a button activated to transmit a feedback signal to the computer as taught by Merminod et al. into the pointing device having roller of Faltermeier et al. and Lo's system because this would support the roller, and give the user a noticeable feedback feel at the point where the switch has been activated, and improve the friction of the user's finger when rotating the roller (see Merminod et al., column 4, lines 6-13, and lines 57-60).

From the claims 2, 4 and 25, it would have been obvious for Faltermeier et al., Lo and Merminod et al.'s system to have the ring being made of a transparent material as claimed since such a modification would have involved a mere change in the material of a system. A change in material is generally recognized as being within the level of ordinary skill in the art.

6. Claims 11, 13-15, 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (US patent 5,712,725) and Lo (US patent 5,699,083) and Merminod et al. (US 6,157,369) and in view of Fisher (US patent 5,903,267).

Faltermeier et al. and Lo and Merminod et al. disclose every feature of the claimed invention as discussed above, however, Faltermeier et al., Lo and Merminod et al. do not disclose wherein the rollable device is adapted to control scrolling of a window shown on the display or a scrolling navigation function, and a user interface program for corresponding state signal to the pointing device. Fisher discloses a method and apparatus for controlling the scroll rate of a scroll bar slider (304) in a graphical user interface (300) of a window (see abstract, see figure 3, see column 5, lines 28-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement for controlling the scroll rate of a scroll bar slider (304) in a graphical user interface (300) of a window as taught by Fisher into the rollable device of Faltermeier et al. Lo and Merminod et al. because this would be displayed in a viewing window with the slider moving the document from one of the current domain to the other end (see abstract).

7. Claims 16-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltermeier et al. (US patent 5,712,725) and Lo (US patent 5,699,083) and Merminod et al. (US patent 6,157,369) and Fisher (US patent 5,903,267) and in view of Gentner et al. (US patent 6,271,838).

Faltermeier et al., Lo, Merminod et al., Fisher and Gentner et al. disclose every feature of the claimed invention, excluding the computer has received new e-mail and then transmit to a pointing device. Gentner et al. disclose in figures 2 and 5 a graphical user interface having the mail view application as display of the window. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mail view application as display in the window as taught by Gentner et al. into the computer system of Faltermeier et al., Lo and Merminod et al. Gentner et al.'s system because this would provide users with incoming e-mail, calendaring, name directory access, and internet browsing capabilities all written in Java programming language (see Gentner et al., see column 1, lines 31-37).

Response To Arguments

8. Applicant's arguments filed on 12/29/04 have been fully considered but they are not persuasive.

Applicant argues that Faltermeier does not disclose the control unit controls the light source to determine an illumination mode of the rollable device, and the rolling wheel comprises a roller and a ring, and the ring surrounds an outer circumference of the roller. However, examiner respectfully disagrees with the argument because Faltermeier discloses the control unit, he does not disclose a light source and the rolling wheel comprises a roller and a ring. Lo

discloses the light source, Merminod discloses the wheel comprises a roller (12) and a ring (40) as discussed above. Therefore, the combination of Faltermeier, Lo and Merminod are satisfied for its intended purpose. For these reasons, the rejections are maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen
January 14, 2005

ALEXANDER EISEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2600